

DIAGNOSES OF SOME NEW INDIAN *ARACHNIDA*.

By R. I. Pocock (Zool. Dept., British Museum).

The following paper contains brief diagnoses of some new Indian *Arachnida*, kindly obtained for me by various members of the Natural History Society of Bombay. I gladly avail myself of the opportunity to thank all those who have been good enough to interest themselves in the way of procuring material for me, but especially must acknowledge my great indebtedness in this particular to Messrs. Phipson, Millard and Wroughton.

The species here diagnosed will be more fully described and dealt with at greater length in a volume on the Scorpions, Pedipalpi, &c., of British India, now in course of publication as part of the series on the Fauna of India, edited by Dr. W. T. Blanford; and I hope at some future time to have the honour of laying before the Natural History Society of Bombay a series of papers in which these and other Indian species will be re-described, their habits discussed, and their more important structural details carefully illustrated, so that facilities may be provided to naturalists resident in India for a further study of this most interesting branch of the fauna.

Order SCORPIONES.

Genus *CHIROMACHETES*, nov.

Allied to the tropical African and Madagascar genus *Opisthacanthus*, but recognisable by having the median eyes far in advance of the middle of the carapace, the lateral eyes marginal.

Chiromachetes fergusoni, sp. n.

Colour.—A tolerably uniform greenish-black above, with the tarsi and vesicle ferruginous; ventral surface yellowish-red.

Carapace and *tergites* smooth, closely punctured; the former deeply excised in the middle of its frontal border. *Tail* slender, punctulate, not granular, and not keeled. *Chelæ* densely punctulate and granular above, long; hand-back nearly twice as long as the width of the hand, longer than the moveable digit, which is strongly lobate and longer than the carapace. *Legs* punctured; femora and tibiæ finely granular; tarsi with 2 posterior and 1 anterior spine beneath.

Total length 100 mm., length of carapace 14.

Locality.—Trivandrum in Travancore (*H. Ferguson*).

Genus PALAMNÆUS, Thor.

Palamnæus wroughtoni, sp. n.

Allied to *P. fulvipes*, C. Koch, with the upper surface of the hand of the pincer similarly crested externally, but with the inner border of the hand much more strongly produced below the base of the immove-

CORRECTION.

Vol. XII, page 745, the last species described at bottom of page should be

Labochirus tauricornis, sp. n.,

instead of

Labochirus cervinus, sp. n.,

which is the name of the previous species described above.

the anterior border of the tibial apophysis produced into an obtusely angular prominence instead of being lightly sinuous as in *L. proboscideus*.

Total length of body 30 mm., carapace 11.

Locality.—Mangalore (*T. Battie*).

Labochirus cervinus, sp. n.

♂. Allied both to *L. proboscideus* and *L. cervinus*, but distinguishable by having the inner border of the hand behind the digit more inflated than in *L. cervinus* and less so than in *L. proboscideus*. Moreover, the posterior border of the tibial apophysis is straight; the anterior border is also straighter than in the other species, not sinuous as in *L. proboscideus* and not inflated as in *L. cervinus*; the extremity of the anterior border convexly rounded.

Total length 28 mm., carapace 11.

Locality.—Kanara (*T. R. D. Bell*).

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Total length 100 mm., length of carapace 14.

Locality.—Trivandrum in Travancore (*H. Ferguson*).

Genus PALAMNÆUS, Thor.

Palamnæus wroughtoni, sp. n.

Allied to *P. fulvipes*, C. Koch, with the upper surface of the hand of the pincer similarly crested externally, but with the inner border of the hand much more strongly produced below the base of the immovable digit, and with the legs deep brown in colour instead of reddish-yellow.

Total length 100 mm., carapace 15.

Locality.—Belgaum (*W. A. Talbot*), and Gadingal in Kolhapur (*Col. Wray*).

Order PEDIPALPI.

Genus THELYPHONUS, Latr.

Thelyphonus muricola, sp. n.

♂. Nearly allied to the Ceylonese and commoner Indian form *T. sepiaris*, Butler, but with the lower side of the abdomen polished, finely sculptured instead of being coarsely corrugated and rugose.

Total length 32 mm., carapace 12.5.

Locality.—Trivandrum in Travancore (*H. Ferguson*).

Genus LABOCHIRUS, Poc.

Labochirus cervinus, sp. n.

♂. Allied to the Ceylonese *L. proboscideus*, Butl., but with the chelæ thinner and longer and scarcely a trace of the large blunt obtusely angular prominence at the base of the hand on the inner side, but with the anterior border of the tibial apophysis produced into an obtusely angular prominence instead of being lightly sinuous as in *L. proboscideus*.

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Order SOLIFUGÆ.

Genus RHAGODES, Poc.

(= *Rhax*, Koch, Simon, Pocock, &c., not *Rhax*, Hermann.)

Rhagodes vittatus, sp. n.

Closely allied to *R. semiflavus*, Poc., but differing in having a broad pale band extending throughout the upper surface of the abdomen and including the last or anal segment. In *R. semiflavus* the pale band only extends over the posterior half of the upper side of the abdomen, and the anal segment is black.

Total length of body and mandibles 30 mm.

Locality.—Karaghora in Kathiawar (*Bombay Nat. Hist. Soc.*).

Order ARANEÆ (Spiders).

Family THERAPHOSIDÆ.

Genus SELENOCASMIA, AUSS.

Selenocasmia himalayana, sp. n.

Colour.—Carapace covered with yellowish-grey pubescence; abdomen brownish-black, with olive-green pubescence above, blackish below; legs nearly black, with the exception of the patellæ and the upper side of the trocanter and coxæ which are yellowish-grey and the same colour as the carapace.

Total length 35 mm., length of carapace 15.

Locality.—Dehra Dun (*F. Gleadow*).

Genus CHILOBRACHYS, Karsch.

Chilobrachys fimbriatus, sp. n.

Colour of upper side a tolerably uniform yellowish-brown; velvety-black below. *Carapace* as long as patella plus tibia of 1st leg, much longer than those of 4th. *Legs* of first pair considerably longer than of 4th; femora of palpi and of anterior two pairs furnished externally with a thick fringe of hairs.

Total length about 50 mm., carapace 26.

Locality.—Khandalla (*Bombay Nat. Hist. Soc.*).

Genus PÆCILOTHERIA, Sim.

Pæcilotheria rufilata, sp. n.

♂. *Colour* of dorsal side of body and limbs a tolerably uniform greyish-red, only obscurely mottled; sternum, coxæ and trochanter velvety-black; femur of palpi black below in the basal two-thirds of its length, with metallic lustre, paler in the distal third of its length;

patella and tibia yellowish-grey below, and furnished with long red bristles ; femur of 1st and 2nd leg with the anterior surface ornamented with a large yellow patch which occupies nearly the basal half of its length ; the rest of the surface black with metallic blue reflections ; patella yellowish-brown, tibia coloured like femur ; underside of 3rd and 4th legs a tolerably uniform yellowish-brown, clothed like the anterior legs with long greyish or reddish bristles ; lower side of abdomen velvety-black.

Length 32 mm., carapace 17.

Locality.—Trivandrum in Travancore (*H. Ferguson*).

Genus HAPLOCLASTUS, Sim.

Haploclastus nilgirinus, sp. n.

At least differing from *H. cervinus*, Sim., according to the description, in being much larger, in having the 4th leg much shorter than the 1st and shorter even than the 2nd.

Total length 52 mm., carapace 24, 1st leg 62, 4th 58.

Locality.—Nilgiri Hills (*Mahon Daly*).

H. cervinus from Kodaikanal has the following dimensions :—Total length 30 mm., carapace 15, 1st leg 39, 4th 38·8.

Genus THRIGMOPEUS, gen. nov.

Allied to the genus here identified as *Haploclastus* of Simon, but the stridulating area on the mandible, consisting of a large semicircular cluster of many-curved, thickened, but pointed, bristles ; on the maxilla the aciculate bristles below the suture arranged in a curved vertical series on a slightly elevated ridge near the middle of the segment. Protarsi of 3rd and 4th legs adorned apically, with spines both above and below.

Type.—*T. insignis*.

Thrigmopeus insignis, sp. n.

♀. *Colour* blackish, clothed above with yellowish-brown hair and below with velvety-black pubescence. Carapace longer than patella, and tibia of 2nd leg and protarsus and tarsus of 4th equal to patella and tibia of 4th ; fovea large, as wide as the ocular tubercle. *Legs* of medium length, 2nd about twice-and-a-half times the length of the carapace ; 1st leg longer than 4th.

Total length 55 mm., carapace 27, 1st leg 76, 4th 73.

Locality.—Kanara Ghats (*Bombay Nat. Hist. Soc.*).

Thrigmopæus truculentus, sp. n.

Smaller and paler in colour than the preceding species ; carapace lower ; fovea smaller, less than width of ocular tubercle ; length of carapace less than patella plus tibia and than protarsus plus tarsus of 4th leg. *Legs* longer, 1st nearly three-and-a-half times as long as the carapace, 2nd about three times as long.

Total length 40 mm., carapace 19, 1st leg 65, 4th 62.

Locality.—Karwar (*Bombay Nat. Hist. Soc.*).

Genus PHLOGIODES, gen. nov.

Thoracic fovea deep and strongly procurved ; eyes of anterior line a little procurved. *Legs* strong, tibiæ unspined ; protarsi of 1st and 2nd spined at apex, and of 3rd and 4th with superior spines as well. Tarsal scopula of 1st, 2nd and 3rd pairs undivided, of 4th narrowly divided in male. Posterior sternal sigilla large and remote from the margin. No tibial spur on anterior leg of male.

Type.—*P. validus*.

Phlogiodes validus, sp. n.

♂. *Colour*.—Carapace covered with a thick coating of silky yellowish hairs ; femora of legs covered above with golden-brown hairs, the rest of the appendages with hoary-grey hairs contrasting strongly with the ruddy tint of the femora ; upper side of abdomen covered with long rich golden-brown hairs. *Carapace* with cephalic region low and narrow ; shorter than patella plus tibia of 1st and 4th legs. *Legs* 4, 1, 2, 3 in length, long and strong, with stout femora ; 4th a little less than four times as long as carapace. Bulb of palpal organ but little inflated ; spine broad and spatulate at base, pointed at its distal end.

Total length 25mm., carapace 12.2, 1st leg 41, 4th leg 46.

Locality.—Matheran (*Bombay Nat. Hist. Soc.*).

Phlogiodes robustus, sp. n.

♀. Too strikingly different from the foregoing to be regarded as the female of the same species. *Carapace* and limbs scantily clothed with short, greyish-red hairs ; abdomen blackish above. Carapace long, almost as long as the patella plus tibia plus $\frac{1}{2}$ protarsus and to tibia plus protarsus plus tarsus of 1st leg ; cephalic region high. *Legs* short and thick ; patella of 1st as long as its tibia and longer than its protarsus ; protarsal scopula of 2nd divided by broad band of setæ ; no protarsal

pad on 3rd ; tarsal pads of 2nd, 3rd and 4th divided by a very broad band of setæ and present only at the sides of the segments.

Total length 27 mm., carapace 13, 1st leg 29, 4th 33.

Locality.—Matheran (*Bombay Nat. Hist. Soc.*).

Genus PLESIOPHRICTUS, gen. nov.

Thoracic fovea transverse, straight ; eyes of anterior line slightly procurved. Sternal sigilla marginal. Legs spined, a few on the anterior tibiæ and protarsi ; many on the posterior pairs ; protarsal scopulæ scanty on 1st, 2nd, and 3rd legs, absent on 4th ; tarsal scopulæ of 3rd and 4th divided by band of setæ. Tibia of anterior leg armed with a strong inferior spur and a smaller tuberculiform spur above it on the inner side.

Type.—*P. millardi*.

Plesiophrictus millardi, sp. n.

Colour of carapace and legs a tolerably uniform mouse-brown, except those clothing the upperside of the protarsus of the 1st leg, which are snow-white. *Carapace* about as long as patella plus tibia of 1st and of 4th legs. *Legs* 4, 1, 2, 3 in length, 4th a little longer than 1st, tibia of 1st incrassate distally. Spine of palpal organ broad at base, filiform apically and spirally twisted.

Total length 12 mm., carapace 6.

Locality.—Matheran (*W. S. Millard*).

Plesiophrictus tenuipes, sp. n.

♀. *Colour* as in the foregoing, but anterior protarsi not white above. *Carapace* slightly less in length than patella plus tibia of 4th, and slightly exceeding those of 1st ; its width about equal to protarsus of 4th. *Legs* 4, 1, 2 and 3 in length, 4th much longer than 1st and scarcely thinner, nearly three times as long as carapace.

Total length 16 mm., carapace 7, 1st leg 16, 4th 20.

Locality.—Kandy in Ceylon (*Col. Yerbury*).

Plesiophrictus collinus, sp. n.

♀. Resembling *P. tenuipes* in colour, but differing in the proportionate length and strength of the legs, the 1st leg being considerably stouter than the 4th and only a little shorter than it ; the 2nd considerably longer than the 3rd, and the 4th less than twice-and-a-half times as long as the carapace.

Total length 18 mm., carapace 8.5, 1st leg 19, 4th 20.

Locality.—Yercaud in the Shevaroy Hills (*J. R. Henderson*).

Family CTENIIDÆ.

Genus ACANTHODON.

Acanthodon opifex, sp. n.

Nearly allied to *A. crassus*, Sim., but darker in colour, the head, palpi and front legs being deep fuscous, and no red tint observable upon the appendages. Area of carapace behind ocular tubercle more elevated than in *A. crassus*; but with the median ocular tubercle flat along the top, not higher in front than behind as in *A. crassus*; anterior laterals more prominent than in the latter species.

Total length 20 mm., carapace 10.

Locality.—Bombay (*H. M. Phipson*).

The only known specimen of this species was received alive in its trap-door nest.

Family ERESIDÆ.

Genus STEGODYPHUS, Sim.

Stegodyphus mirandus, sp. n.

♀. *Colour*.—Carapace, mandible, palpi, legs and mouth-parts black, clothed with olive-black hairs; sternum with narrow dark border and marked with two parallel bands of yellowish-grey hairs; abdomen testaceous, clothed with yellowish hairs; spinners and anal tubercle black.

Total length 20 mm., carapace 8.

♂. *Colour*.—Abdomen black; tibia, protarsus and tarsus of 1st leg and the whole of the 2nd, 3rd and 4th legs bright red, the coxa and trochanters alone being blackish-brown.

Total length 12 mm., carapace 6.

Locality.—Bombay (*Bombay Nat. Hist. Soc.*).

Family PSECHRIDÆ.

Genus FECENIA, Thor.

Fecenia travancoria, sp. n.

Closely related to the Burmese species *F. cylindrata*, Thorell, but with the eyes more widely spaced, those of the posterior line being straight or slightly procurved. Depression of vulva completely divided by a high longitudinal keel, the posterior border deeply and angularly emarginate. (In *F. cylindrata* the depression of the vulva is undivided.)

Total length 13 mm., carapace 5·3.

Locality.—Madatory in Travancore (*H. Ferguson*).

First record of the genus *Fecenia* from India.

Genus PSECHRUS, Thor.

Psechrus alticeps, sp. n.

♀. Easily recognisable from the Ceylon species *P. torvus*, by having the cephalic region of the carapace narrower, more sharply defined and much higher, and the anterior line of eyes much more strongly procurved. The legs are also much longer.

Total length 15 mm., carapace 6.5, 1st leg 49.

Locality.—Ponmudi in Travancore (*H. Ferguson*).

First record of genus *Psechrus* from India.

Family HERSILIIDÆ.

Genus TAMA, Sim.

Tama variata, sp. n.

♀. Colour.—Carapace brown in middle, blacker at sides, clothed with grey and black hairs; pale mark on head, red hairs about the eyes, edge of clypeus testaceous, clothed with white hairs; upper side of abdomen blackish, variegated. Posterior border of vulva produced into a median convex lobe. ♂. Smaller than ♀, with patella and tibia of palp unmodified; tibia twice as long as patella.

Total length (♀) 10 mm., (♂) 6.

Locality.—Kandy (*E. E. Green*).

Family LYCOSIDÆ.

Genus LYCOSA, Latr.

Lycosa phipsoni, sp. n.

Allied to the Burmese species *L. nigrotibialis*, Sim., but with stouter legs and a little differently coloured, the femora of the legs being scarcely paler than the coxæ and without an apical fuscous band beneath. Moreover, in the female the carapace is longer than the patella and tibia of the 4th leg, and in the male the carapace is equal to the protarsus of the 4th.

Total length ♀ 20 mm., carapace 10. Total length of ♂ 19 mm., carapace 10.

Locality.—Bombay (*H. M. Phipson*).

Lycosa wroughtoni, sp. n.

♂. Closely allied to the Ceylonese and Indian species *L. indugatrix*, Walck., in having the mandible clothed in front with red hairs and in general colour and structure, but differing in the darker colour of the anterior femora, the absence of a median white band on the anterior